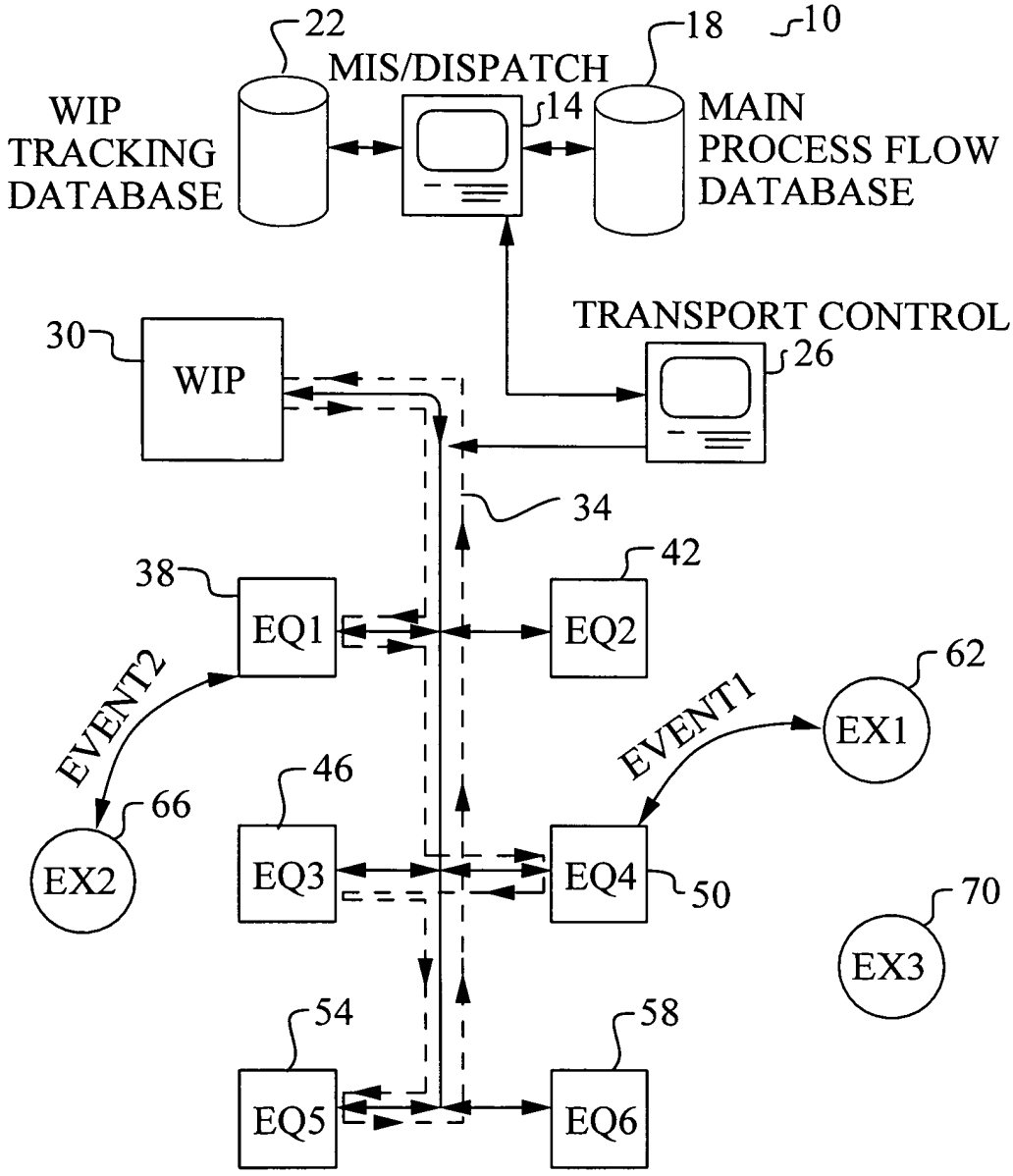

FIG. 1 Prior Art

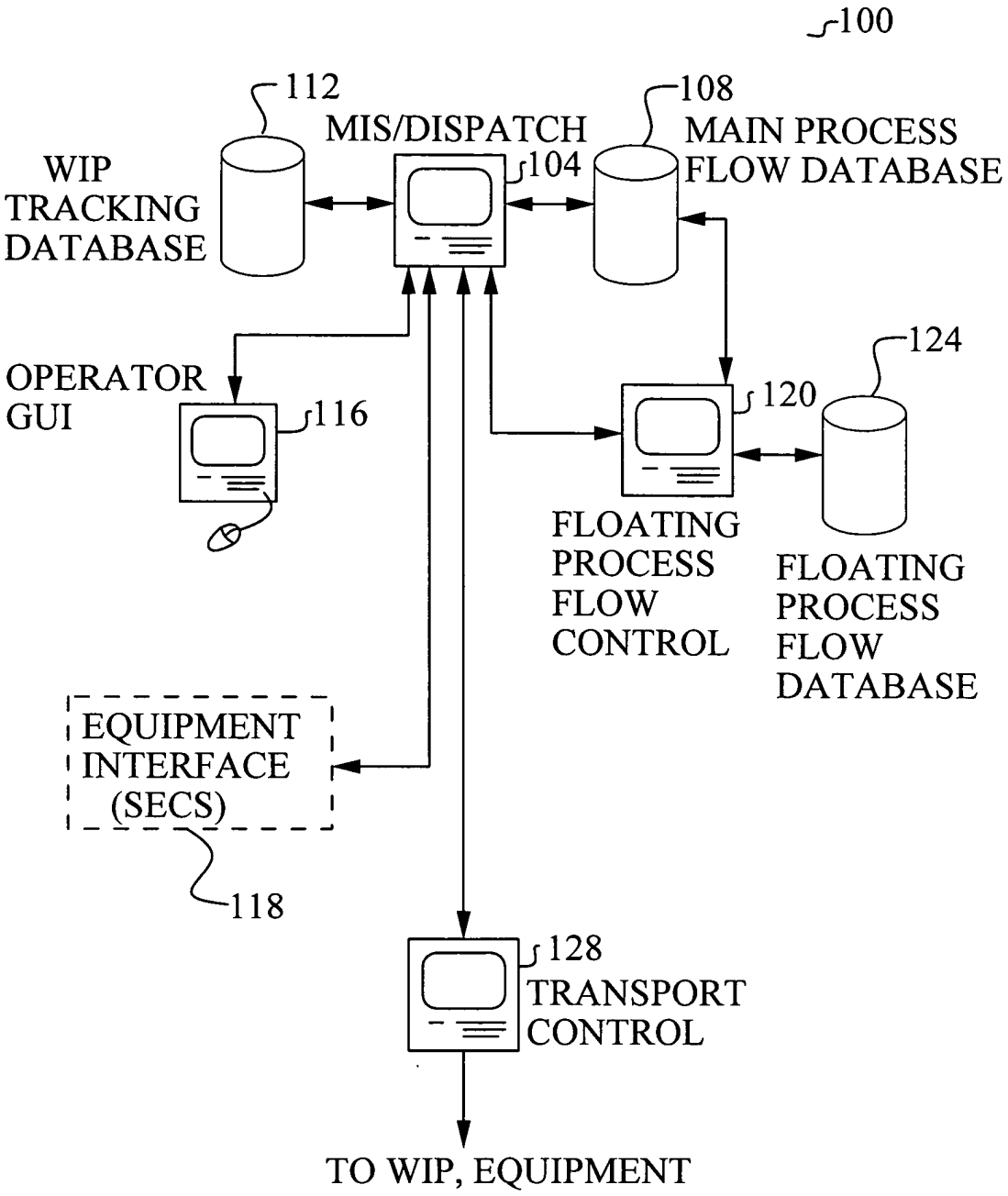
100
112
WIP
TRACKING
DATABASE
MIS/DISPATCH
104
108
MAIN PROCESS
FLOW DATABASE
OPERATOR
GUI
116
120
124
FLOATING
PROCESS
FLOW
CONTROL
FLOATING
PROCESS
FLOW
DATABASE
EQUIPMENT
INTERFACE
(SECS)
118
128
TRANSPORT
CONTROL
TO WIP, EQUIPMENT

FIG. 2

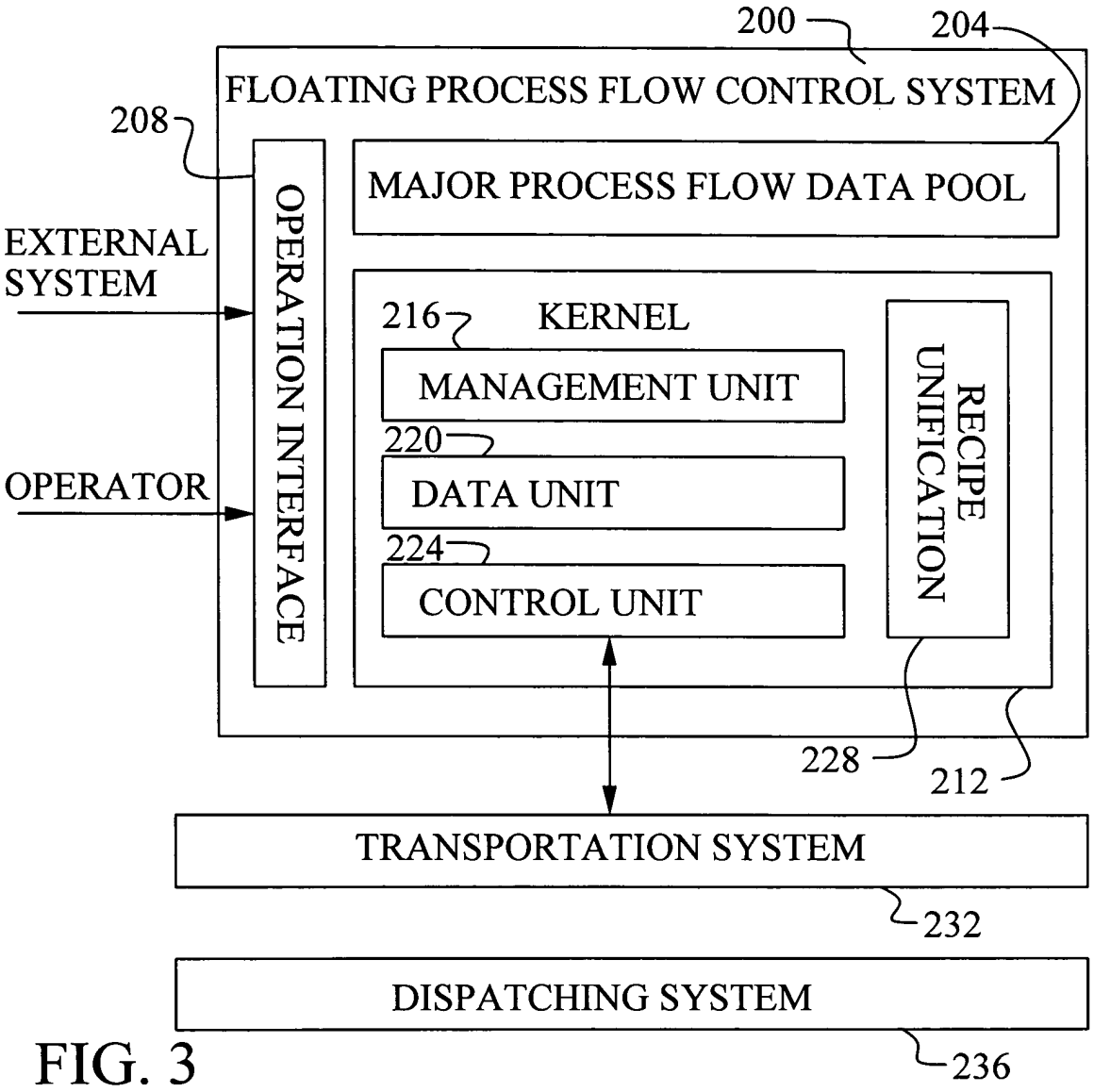
200
204
FLOATING PROCESS FLOW CONTROL SYSTEM
208
OPERATION INTERFACE
MAJOR PROCESS FLOW DATA POOL
EXTERNAL SYSTEM
OPERATOR
216
KERNEL
MANAGEMENT UNIT
220
DATA UNIT
224
CONTROL UNIT
RECIPE UNIFICATION
228
212
TRANSPORTATION SYSTEM
232
DISPATCHING SYSTEM
236

FIG. 3

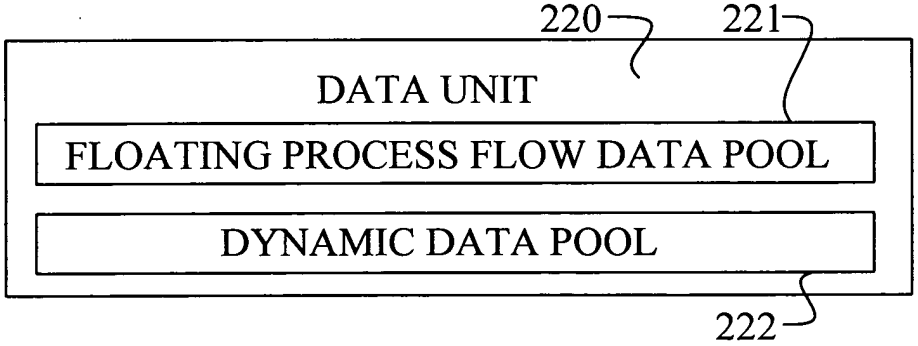
220
221
DATA UNIT
FLOATING PROCESS FLOW DATA POOL
DYNAMIC DATA POOL
222

FIG. 4

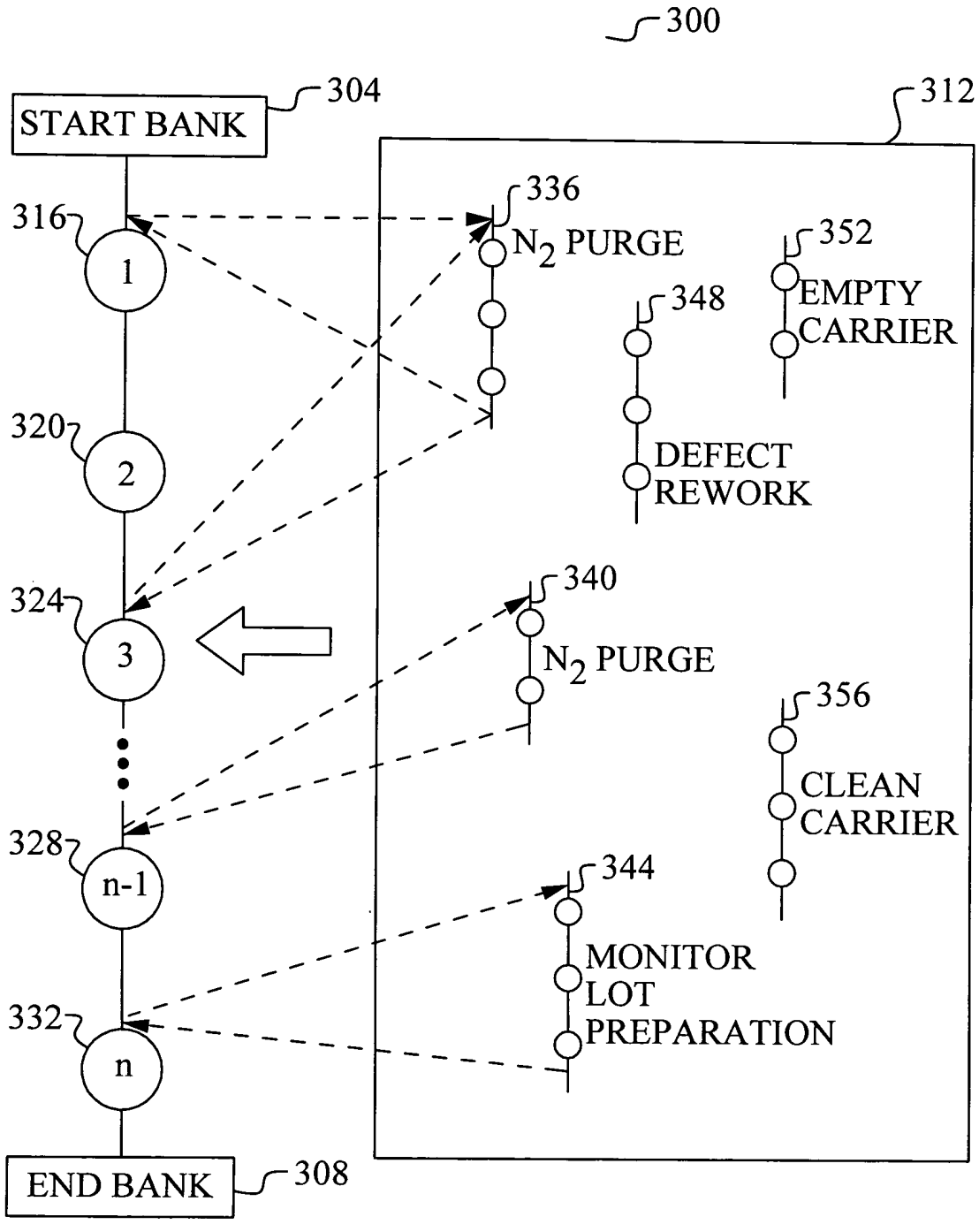
300
START BANK
304
312
316
1
320
2
324
3
328
n-1
332
n
END BANK
308
336
N_2 PURGE
352
EMPTY CARRIER
348
DEFECT REWORK
340
N_2 PURGE
356
CLEAN CARRIER
344
MONITOR LOT PREPARATION

FIG. 5

400

TIME SEQ.	INVOLVED UNITS							ACTIVITY
	Trans. System	Dispatch System	Operation System	Control Unit	Mgmt. Unit	Data Unit	Recipe Unify	
STEP 1					X	X	X	Input floating process flow through management unit & keep on data unit. Unify flow by recipe unification.
STEP 2			X					Operation interface receives external trigger and passes it to control unit. Trigger may be operator of system.
STEP 3				X		X		Control unit extracts a proper floating process flow from a data unit. Connect floating to standard flow.
STEP 4	X			X				Control unit triggers a transportation system to move a lot to equipment of 1st oper. in floating process flow.
STEP 5	X	X						Dispatch and transport system control lot movement in full automation mode.
STEP 6				X		X		When floating flow complete, return to standard flow. Control unit destroys connection between flows.

FIG. 6